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☐ 1 : P16150 . LEUKOSIALIN PRECUR...[gi:126213]

PubMed, Related Sequences

LOCUS LEUK\_HUMAN 400 aa PRI 15-JUL-1999  
 DEFINITION LEUKOSIALIN PRECURSOR (LEUCOCYTE SIALOGLYCOPROTEIN) (SIALOPHORIN) (CD43 ANTIGEN) (GALACTOGLYCOPROTEIN) (GALGP).  
 ACCESSION P16150  
 PID g126213  
 VERSION P16150 GI:126213  
 DBSOURCE swissprot: locus LEUK\_HUMAN, accession P16150;  
 class: standard.  
 created: Apr 1, 1990.  
 sequence updated: Apr 1, 1990.  
 annotation updated: Jul 15, 1999.  
 xrefs: gi: 187118, gi: 307124, gi: 338230, gi: 338231, gi: 36455, gi: 36456, gi: 180125, gi: 180126, gi: 107686, gi: 106898, gi: 106899, gi: 88098, gi: 107688  
 xrefs (non-sequence databases): MIM 182160  
 KEYWORDS Glycoprotein; Transmembrane; Signal; T-cell; Antigen.  
 SOURCE human.  
 ORGANISM Homo sapiens  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
 REFERENCE 1 (residues 1 to 400)  
 AUTHORS Pallant,A., Eskenazi,A., Mattei,M.G., Fournier,R.E., Carlsson,S.R  
 TITLE Fukuda,M. and Frelinger,J.G.  
 JOURNAL Characterization of cDNAs encoding human leukosialin and localization of the leukosialin gene to chromosome 16  
 MEDLINE Proc. Natl. Acad. Sci. U.S.A. 86 (4), 1328-1332 (1989)  
 REMARK 89145235  
 REFERENCE 2 (residues 1 to 400)  
 AUTHORS Shelley,C.S., Remold-O'Donnell,E., Davis,A.E. III., Bruns,G.A., Rosen,F.S., Carroll,M.C. and Whitehead,A.S.  
 TITLE Molecular characterization of sialophorin (CD43), the lymphocyte surface sialoglycoprotein defective in Wiskott-Aldrich syndrome  
 JOURNAL Proc. Natl. Acad. Sci. U.S.A. 86 (8), 2819-2823 (1989)  
 MEDLINE 89202417  
 REMARK SEQUENCE FROM N.A.  
 Erratum: [[published erratum appears in Proc Natl Acad Sci U S A 1989 Jun;86(12):4689]]  
 REFERENCE 3 (residues 1 to 400)  
 AUTHORS Shelley,C.S., Remold-O'Donnell,E., Rosen,F.S. and Whitehead,A.S.  
 TITLE Structure of the human sialophorin (CD43) gene. Identification of features atypical of genes encoding integral membrane proteins  
 JOURNAL Biochem. J. 270 (3), 569-576 (1990)  
 MEDLINE 91054342  
 REMARK SEQUENCE FROM N.A.  
 REFERENCE 4 (residues 1 to 400)  
 AUTHORS Kudo,S. and Fukuda,M.  
 TITLE A short, novel promoter sequence confers the expression of human leukosialin, a major sialoglycoprotein on leukocytes  
 JOURNAL J. Biol. Chem. 266 (13), 8483-8489 (1991)

MEDLINE 91217090  
 REMARK SEQUENCE FROM N.A.  
 REFERENCE 5 (residues 1 to 400)  
 AUTHORS SCHMID,K., HEDIGER,M.A., BROSSMER,R., COLLINS,J.H., HAUPT,H.,  
 MARTI,T., OFFNER,G.D., SCHALLER,J., TAKAGAKI,K., WALSH,M.T.,  
 SCHWICK,H.G., ROSE,F.S. and REMOLD-O'DONNELL,E.  
 TITLE Amino acid sequence of human plasma galactoglycoprotein: identity  
 with the extracellular region of CD43 (sialophorin)  
 JOURNAL Proc. Natl. Acad. Sci. U.S.A. 89 (2), 663-667 (1992)  
 MEDLINE 92115721  
 REMARK PARTIAL SEQUENCE OF 20-245, AND CARBOHYDRATE-BINDING SITES.  
 COMMENT

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 This SWISS-PROT entry is copyright. It is produced through a  
 collaboration between the Swiss Institute of Bioinformatics and  
 the EMBL outstation - the European Bioinformatics Institute.  
 The original entry is available from <http://www.expasy.ch/sprot>  
 and <http://www.ebi.ac.uk/sprot>  
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[FUNCTION] ONE OF THE MAJOR GLYCOPROTEINS OF THYMOCYTES AND T  
 LYMPHOCYTES. PLAYS A ROLE IN THE PHYSICOCHEMICAL PROPERTIES OF TH  
 T-CELL SURFACE AND IN LECTIN BINDING. PRESENTS CARBOHYDRATE LIGAN  
 TO SELECTINS. HAS AN EXTENDED RODLIKE STRUCTURE THAT COULD PROTRU  
 ABOVE THE GLYCOALYX OF THE CELL AND ALLOW MULTIPLE GLYCAN CHAINS  
 TO BE ACCESSIBLE FOR BINDING.

[SUBCELLULAR LOCATION] TYPE I MEMBRANE PROTEIN.

[TISSUE SPECIFICITY] CELL SURFACE OF THYMOCYTES, T LYMPHOCYTES,  
 NEUTROPHILS, PLASMA CELLS AND MYELOMAS.

[PTM] HAS A HIGH CONTENT OF SIALIC ACID AND O-LINKED CARBOHYDRATE  
 STRUCTURES.

[DISEASE] CD43 EXPRESSION IS DEFECTIVE ON THE T-CELLS OF MALES WI  
 THE IMMUNODEFICIENCY WISKOTT-ALDRICH SYNDROME. AFFECTED MALES ARE  
 SUSCEPTIBLE TO OPPORTUNISTIC INFECTIONS AND DO NOT RESPOND TO  
 POLYSACCHARIDE ANTIGENS, REFLECTING DEFECTS IN CYTOTOXIC AND HELP  
 T-CELL FUNCTIONS.

[DATABASE] NAME=PROW; NOTE=CD guide CD43 entry;  
 WWW='http://www.ncbi.nlm.nih.gov/prow/cd/cd43.htm'.  
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## ORIGIN

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Revised: January 10, 2000.

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